

US Army Corps  
Of Engineers  
Wilmington District

# PUBLIC NOTICE

Issue Date: 21 February 2006  
Comment Deadline: 23 March 2006  
Corps Action ID No: 200501184

The Wilmington District, Corps of Engineers (Corps) has received an application from **Helmsdale Investors, LLC** seeking Department of the Army authorization to impact **0.295 acres of Section 404 jurisdictional wetlands and 72 linear feet of an unnamed tributary to Howe Creek** associated with **proposed Helmsdale at Landfall residential subdivision, located in the Landfall community, Wilmington in New Hanover County, North Carolina.**

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at [www.saw.usace.army.mil/wetlands](http://www.saw.usace.army.mil/wetlands)

**Applicant:** Helmsdale Investors, LLC  
Attn: Mr. Thad Moore  
Preston Development Company, LLC  
100 Weston Estates Way  
Cary, North Carolina 27513

**AGENT (if applicable):** Land Management Group, Inc.  
Attn: Ms. Kim Williams  
Post Office Box 2522  
Wilmington, North Carolina 28402

## Authority

The Corps will evaluate this application and decide whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of Section 404 of the Clean Water Act (33 U.S.C. 1344).

## Location

The 40.5-acre project area is comprised of three parcels: 701 Old McCumber Station Road (8.90 acres), 558 Arboretum Drive (23.80 acres), and 705 Old McCumber Station Road (7.80 acres), which are located along the southside of Arboretum Drive, west of South Moorings Drive, in the Landfall community, in Wilmington, New Hanover County, North Carolina. The site contains approximately 8.61 acres of jurisdictional

wetlands and waters adjacent and hydrologically connected to Howe Creek, a tributary to the Atlantic Intracoastal Waterway, a navigable Water of the United States. Site coordinates are 34.2493N, -77.8209W.

### **Existing Site Conditions**

The site is currently undeveloped and forested. Uplands support longleaf pine (*Pinus palustris*), red bay (*Persea palustris*), tulip poplar (*Liriodendron tulipifera*), blueberry (*Vaccinium crassifolium*), and wiregrass (*Aristida stricta*). Wetlands within the tract consist of fingers to Howe Creek. The upper reaches support red maple (*Acer rubrum*), ironwood (*Carpinus caroliniana*), loblolly pine (*P. taeda*) and wax myrtle (*Myrica cerifera*). Howe Creek along the western property boundary is typically inundated and supports bald cypress (*Taxodium distichum*) and black gum (*Nyssa sylvatica*) trees.

According to the United States Department of Agriculture Soil Survey of New Hanover County (April 1977), the site is underlain by Johnston loam, Murville fine sand, Craven fine sandy loam, Onslow loamy fine sand, Rains fine sandy loam, Kenansville fine sand, Seagate fine sand, and Torhunta loamy fine sand soil types.

Land use to the north and east of the tract is residential and consists of the Landfall community. A forested area that has been dedicated as a conservation area by Landfall exists to the south of the project area. Howe Creek bounds the property to the west. Beyond Howe Creek to the west, there exists a Carolina Power and Light easement and residential development.

### **Applicant's Stated Purpose**

The purpose of the project is to provide access to a proposed 48-lot residential subdivision.

### **Project Description**

The applicant has proposed to construct the Helmsdale at Landfall residential subdivision, which consists of 48 single-family lots, common areas and infrastructure. The proposed wetland and stream impacts (0.295 acre and 72 linear feet, respectively) are associated with four subdivision road crossings and two driveway crossings.

The applicant has also submitted an Alternatives Analysis that includes both on-site and off-site alternatives. This information has been included with this Public Notice.

The applicant has also submitted a mitigation proposal with their application that includes on-site preservation of the remaining 8.25 acres of wetlands. In addition, they propose to preserve an additional 30 acres of coastal and freshwater wetlands within the Landfall community. Finally, the application also proposes to create approximately 0.295 acre of wetlands within the Landfall community.

## **Other Required Authorizations**

This notice and all applicable application materials are being forwarded to the appropriate State agencies for review. The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice in the NCDWQ Central Office in Raleigh serves as application to the NCDWQ for certification. A waiver will be deemed to occur if the NCDWQ fails to act on this request for certification within sixty days of the date of the receipt of this notice in the NCDWQ Central Office. Additional information regarding the Clean Water Act certification may be reviewed at the NCDWQ Central Office, 401 Oversight and Express Permits Unit, 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for certification under Section 401 of the Clean Water Act should do so in writing delivered to the North Carolina Division of Water Quality (NCDWQ), 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Attention: Ms Cyndi Karoly by March 16, 2006.

## **Coastal Area Management Act**

The applicant has certified that the proposed work complies with and will be conducted in a manner that is consistent with the approved North Carolina Coastal Zone Management Program. Pursuant to 33 CFR 325.2 (b)(2) the Corps is, by this notice, forwarding this certification to the North Carolina Division of Coastal Management (NCDCM) and requesting its concurrence or objection. Generally, the Corps will not issue a Department of the Army (DA) permit until the NCDCM notifies the Corps that it concurs with the applicant's consistency certification.

## **Essential Fish Habitat**

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed project will not adversely impact EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

## **Cultural Resources**

The Corps has consulted the latest published version of the National Register of Historic Places and is not aware that any registered properties, or properties listed as being eligible for inclusion therein are located within the project area or will be affected by the proposed work. Presently, unknown archeological, scientific, prehistoric, or historical data may be located within the project area and/or could be affected by the proposed work.

## **Endangered Species**

The Corps has reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps has determined pursuant to the Endangered Species Act of 1973, that the proposed project will have no effect on federally listed endangered or threatened species or their formally designated critical habitat.

## **Evaluation**

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

## **Commenting Information**

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidate State Viewpoint or written position of the Governor; Indian Tribes and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, March 23, 2006. Comments should be submitted to Jennifer S. Frye, Post Office Box 1890, Wilmington, North Carolina, 28402-1890, at (910) 251-4923.

## PROJECT NARRATIVE

January 2006

Helmsdale at Landfall  
New Hanover County, NC

### INTRODUCTION

Helmsdale Investors, LLC is proposing to construct Helmsdale at Landfall, which is located in Wilmington, NC. This tract is landlocked except for access from roads within the existing Landfall Subdivision. The only way to develop the site is to incorporate it into Landfall. The applicant plans to build forty-eight lots within the site, which is located at the intersection of Arboretum Drive and South Moorings Drive. Several wetland fingers need to be crossed in order to gain access to uplands.

### EXISTING CONDITIONS

The 40.5-acre project site is located in Wilmington, NC off of Arboretum Drive in New Hanover County, NC (Figures 1 & 2). According to the New Hanover County Generalized Soil Survey, the site consists of Johnston loam, Murville fine sand, Craven fine sandy loam, Onslow loamy fine sand, Rains fine sandy loam, Kenansville fine sand, Seagate fine sand, and Torhunta loamy fine sand soil types (Figure 3). Land use to the north and east of the tract is residential and consists of the Landfall Subdivision. A forested area that has been dedicated as a conservation area by Landfall exists south of the site (Figure 4). An unnamed tributary of Howe Creek forms the western property boundary and several fingers of this creek extend across the tract, forming approximately 8.55 acres of freshwater wetlands within the tract.

The site is currently undeveloped and forested. Uplands support longleaf pine (*Pinus palustris*), red bay (*Persea palustris*), tulip poplar (*Liriodendron tulipifera*), blueberry (*Vaccinium crassifolium*), and wiregrass (*Aristida stricta*). Wetlands within the tract consist of fingers of the unnamed tributary of Howe Creek. The upper reaches support red maple (*Acer rubrum*), ironwood (*Carpinus caroliniana*), loblolly pine (*P. taeda*) and wax myrtle (*Myrica cerifera*). The creek along the western property boundary contains standing water and supports bald cypress (*Taxodium distichum*) and black gum (*Nyssa sylvatica*) trees.

The presence of any plant or animal species is determined by the availability and abundance of suitable habitat. Habitat with the potential for supporting federally listed threatened or endangered species was identified by reviewing natural resource databases, aerial photographs, soils maps, and topographic maps of the property and by walking throughout the project area. A search of the North Carolina Natural Heritage Program database was conducted to determine whether any state or federally listed rare species have previously been observed within or near the project area. This search found no known record of rare species within the project site, but located four records within a one-mile radius of the site. Two rare plants were observed approximately 1000 feet southwest of the site. The snowy orchid (*Platanthera nivea*; state-listed Threatened) was observed in 1989 and the twisted-leaf goldenrod (*Solidago tortifolia*; state-listed Significantly Rare) was observed in 1964. Two rare animals were also observed. The chicken turtle (*Deirochelys reticularia*; state-listed Significantly Rare) was noted approximately one mile south of the site and the Carolina diamondback terrapin (*Malaclemys terrapin centrata*; state-listed Species of Concern) was observed one mile east of the site.

On January 10, 2006, staff of Land Management Group, Inc. evaluated the tract for its potential to support federally-listed threatened or endangered species (Table 1). No federally protected species were observed within the site. Uplands within the tract are forested and contain some fairly large loblolly pine trees. However, the uplands are densely vegetated and do not contain appropriate habitat for the red-cockaded woodpecker, which requires large stands of mature pine trees in which to nest and forage. Wetlands within the tract are thickly vegetated and would not support rare plant species, such as Cooley's meadowrue and rough-leaf loosestrife. Although the western property boundary consists of a tributary to Howe Creek, this feature is fairly small and would not provide suitable habitat for the American alligator or the shortnose sturgeon.

Table 1. Federally-listed endangered and threatened species known to occur in New Hanover County, NC, excluding coastal and marine species.

Common Name	Scientific Name	Status
<b>Animals</b>		
American alligator	<i>Alligator mississippiensis</i>	T(S/A)
Red-cockaded woodpecker	<i>Picoides borealis</i>	E
Shortnose sturgeon	<i>Acipenser brevirostrum</i>	E
<b>Plants</b>		
Cooley's meadowrue	<i>Thalictrum cooleyi</i>	E
Rough-leaf loosestrife	<i>Lysimachia asperulaefolia</i>	E

KEY:

Status	Definition
Endangered	A taxon "in danger of extinction throughout all or a significant portion of its range."
Threatened	A taxon "likely to become endangered within the foreseeable future throughout all or a significant portion of its range."
T(S/A)	Threatened due to similarity of appearance - a species that is threatened due to similarity of appearance with other rare species and is listed for its protection.

## ALTERNATIVES ANALYSIS

The alternatives evaluated include a no-action alternative, off-site alternatives, on-site alternative site layouts, and the preferred project.

### No-Action Alternative

The no-action alternative would keep the site in its current, undeveloped condition and would keep Landfall from expanding its subdivision into this area. The no-action alternative is not considered feasible for several reasons. Wilmington is experiencing rapid growth. It would leave approximately 40.5 acres of land undeveloped. This would cost the current owner of the tract approximately \$4,000,000 in potential revenue. Without annexing the tract into Landfall, the tract would be unbuildable since there are no other ways to access the site. The inability to expand development within this tract of land would be a significant loss of return for the applicant and a loss of upscale housing for the community.

### Alternate Sites

The proposed project will become an expansion of the existing Landfall Subdivision. According to its regulations, Landfall can only annex those tracts of land that have their sole access from Landfall. Based on these rules, the off-site alternatives evaluated were adjacent, undeveloped tracts without alternate access. Only one tract meeting these criteria was located.

#### Grant Farm Tracts

These three tracts encompass 26.02 acres and are located on the north side of Arboretum Drive, west of Pembroke Jones Lake (Figure 5). The tracts currently contain one residence and farm land. Wetlands likely exist on the northern part of the property, where



Howe Creek forms the border. Landfall has attempted to purchase the tract from its owners, Adair and Louise Graham, but they are not willing to sell. Therefore, the development of this site by Landfall is not considered a feasible alternative.

### **On-site Alternatives**

Two on-site alternatives were evaluated. The first option is an alternate roadway pattern that would stop before crossing any wetlands. The second is developing uplands within the entire site by bridging all of the wetland crossings.

#### **1. Alternate Roadway Pattern**

An alternate roadway pattern was evaluated in which wetlands were not crossed (Figure 6). This site plan allows the development of thirty-two lots. A short cul-de-sac off of Arboretum Drive would provide access to lots #1 through #17 and the existing Arboretum Drive would provide access to lots #18 through #32. In addition, one very large lot (#8) would be entered from South Moorings Drive. This alternative would develop sixteen fewer lots than the preferred alternative, which would be a loss of approximately \$2,786,000 dollars (Figure 7). Because of this financial loss, this site plan is not considered a viable alternative.

#### **2. Bridging Wetlands**

The applicant evaluated the potential to develop forty-eight lots within the site and cross wetlands by constructing bridges. In general, bridges are not considered to be a wetland impact by the Corps and DWQ and could provide a mechanism to avoid any wetland impacts within the tract. Four bridges would need to be constructed to NC DOT standards, which would cost approximately \$1,000,000 total (Figure 8). In addition, two smaller bridges would be needed for driveway crossings in Lots #10 and #18, which would cost approximately \$250,000. Because of this cost, this option is not economically feasible.

### **Preferred Project**

The preferred project consists of constructing forty-eight lots within the property and building two roads; one narrow private drive that would parallel Arboretum Drive and would provide access to Lots #34 through #48 (Figure 9). The other road has a 50' right-of way and would extend from Arboretum Drive to South Moorings Drive and provide access to Lots #1 through #33. This road

would require crossing four wetland fingers, one of which is a stream as well. Culverts will be installed at the wetland crossings (Figure 10). Utilities would also be extended into this area, within the road right-of-way. Additionally, two driveway crossings would be needed within Lots #10 and #18.

## **POTENTIAL ENVIRONMENTAL IMPACTS**

The proposed project would impact 0.295 acre of 404 wetlands and 72 linear feet of stream (Figures 11 & 12). Secondary impacts to wetlands and water quality could occur during and after construction of the project through erosion and stormwater runoff. These potential impacts will be minimized by the development and implementation of a Stormwater Plan and a Sedimentation and Erosion Control Plan. These plans will reduce the potential for erosion or runoff into wetlands and other water bodies located off site.

It should be noted that a total of 83.5 acres of wetland disturbance has already occurred within the greater Landfall Subdivision. These impacts have been permitted by the U.S. Army Corps of Engineers, Division of Water Quality, and Division of Coastal Management and the required mitigation has been completed (attached).

## **MITIGATION**

To mitigate for proposed wetland impacts, restrictive covenants will be recorded on all remaining wetlands within this tract to prohibit any wetland fill beyond what is being requested here. This will protect approximately 8.25 acres of wetlands. In addition, approximately thirty acres of coastal and freshwater wetlands within Landfall will be placed into preservation. Finally, the applicant plans to create at least 0.295 acre of wetlands within an area owned by the Homeowner's Association of Landfall that is located off of Drysdale Drive (Figure 13). The applicant is in the process of developing a complete mitigation plan for this area.



© DeLorme



SITE

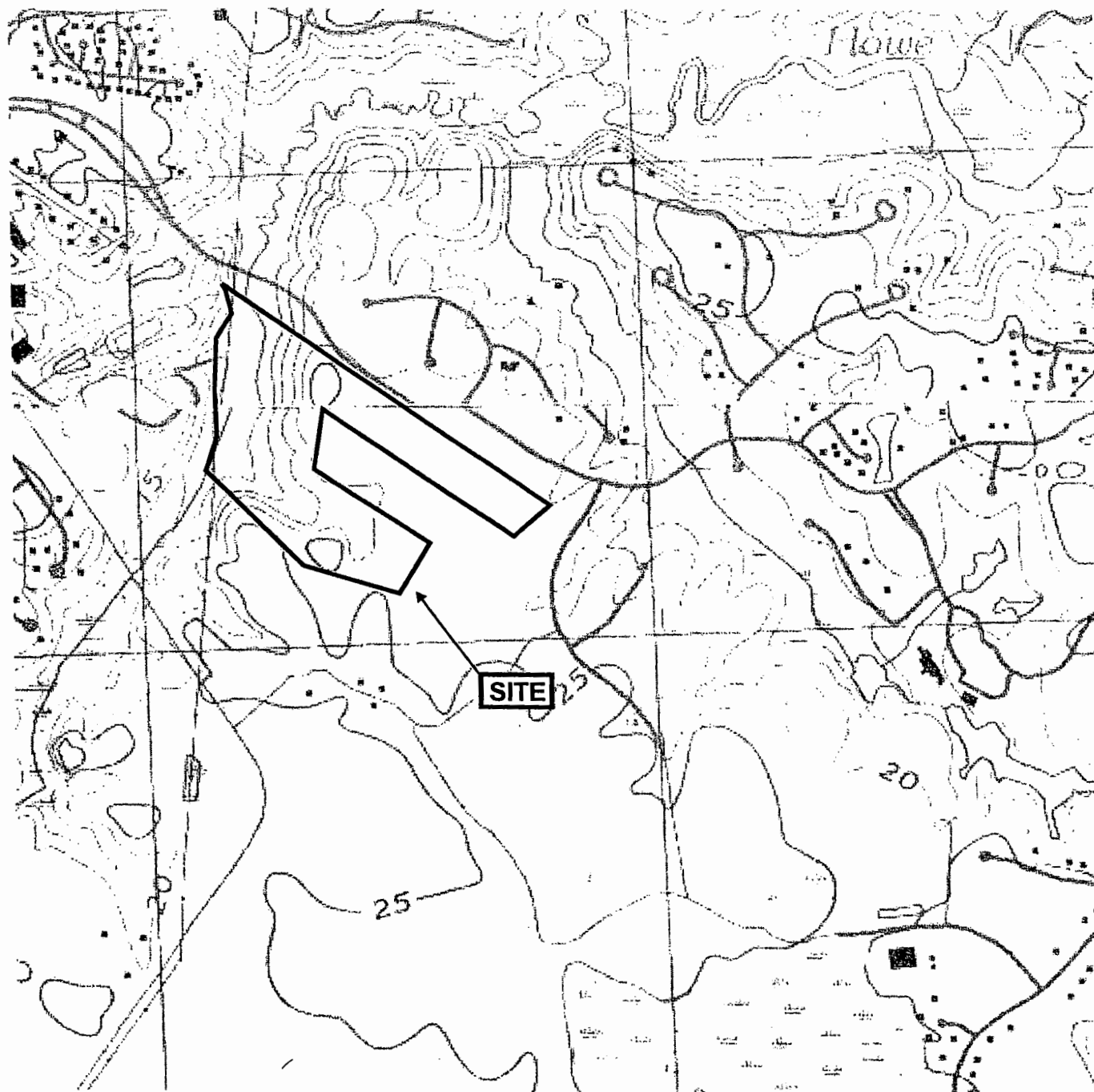
Map Source: DeLorme North Carolina Atlas and Gazetteer, pg. 84.

SCALE 1" = 2.4 miles

Helmsdale at Landfall  
New Hanover County, NC  
Individual Permit Application  
40-05-298P

**Land Management Group, Inc.**  
Environmental Consultants  
Wilmington, N.C.  
January 2006

Figure 1. Vicinity Map



— Site Boundary



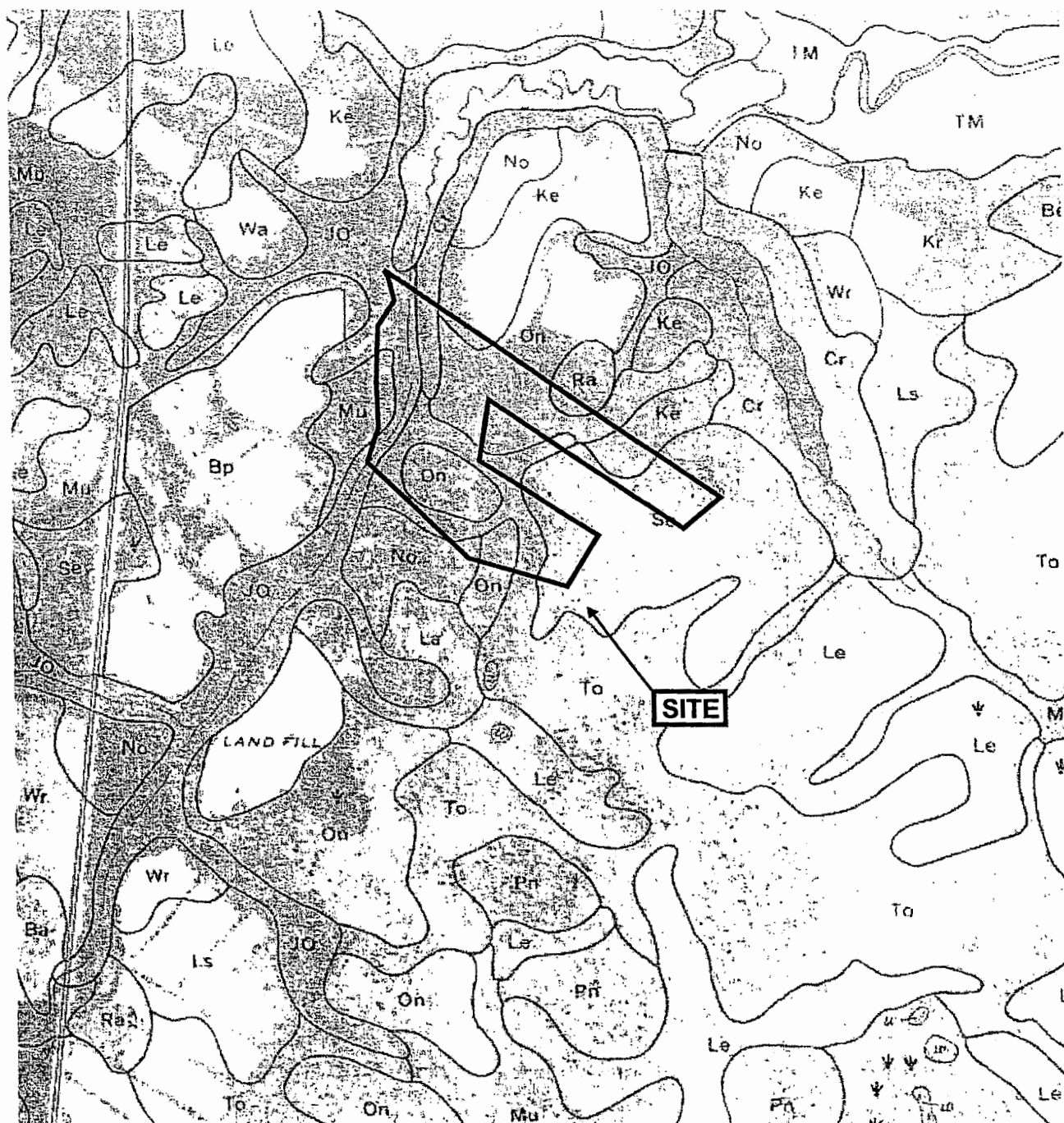
SCALE 1" = 1000'

Map Source: USGS Topographic Quadrangle, Wrightsville Beach

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Figure 2. Topographic Map



— Site Boundary



SCALE 1" = 1000'

Map Source: New Hanover County soil survey

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Figure 3. Soils Map





SCALE 1" = 400'

Helmsdale at Landfall  
New Hanover County, NC  
Individual Permit Application  
40-05-298P

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Wilmington, N.C.  
January 2006

Figure 4.  
Aerial photograph of site.

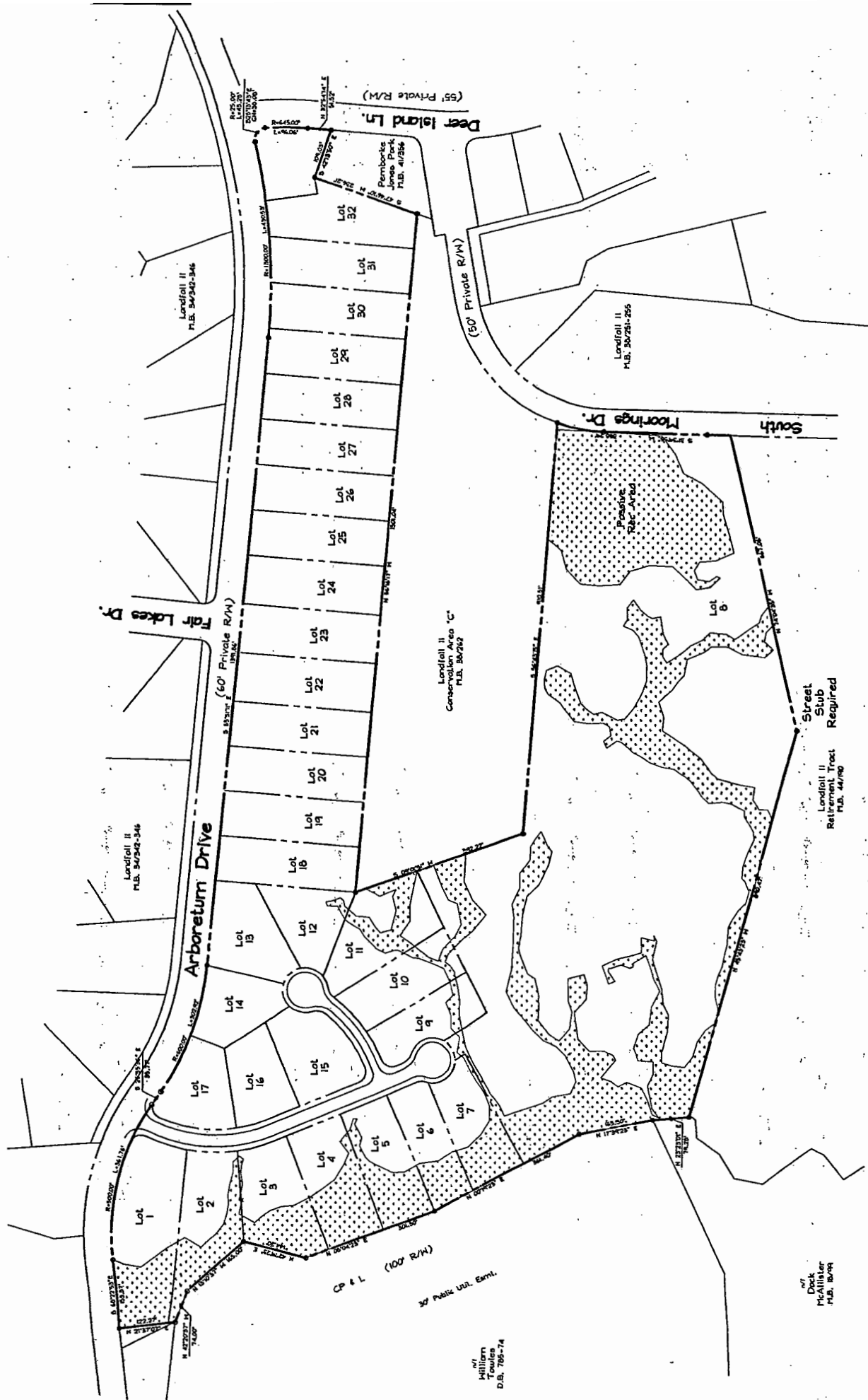


SCALE 1" = 1000'

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Wilmington, N.C.  
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Figure 5.  
Off site alternative:  
Graham Farm Tract



HELMSDALE AT LANDFALL

FIGURE 6. ON-SITE ALTERNATIVE #1.



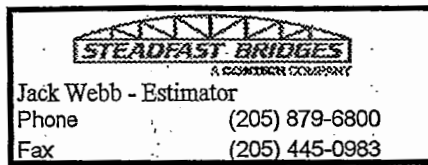
**HELMSDALE**  
**PROFIT ANALYSIS**

1/20/2006

	<b>32 LOTS</b>	<b>48 LOTS</b>
LAND	4,000,000	4,000,000
INFRASTRUCTURE	539,000	930,300
CLEARING/STUMPING	81,000	129,000
INTEREST	330,780	342,519
MARKETING	100,000	100,000
COMMISSIONS	384,000	576,000
SURVEY	16,000	24,000
ENGINEERING	50,000	65,000
LAND PLANNING	20,000	25,000
LEGAL	20,000	22,500
ACCOUNTING	10,000	10,000
ON SITE MANAGEMENT	25,000	35,000
TOTAL EXPENSES	5,575,780	6,259,319
SALES PROCEEDS	6,400,000	9,600,000
MEMBERSHIP PROCEEDS	640,000	960,000
TOTAL PROCEEDS	7,040,000	10,560,000
PRETAX PROFIT	1,464,220	4,300,681
MITIGATION EXPENSE	-	50,000
PRETAX PROFIT AFTER MITIGATION	1,464,220	4,250,681
PROFIT DIFFERENTIAL	<b>2,786,461</b>	
AVERAGE SALES PRICE	200,000	
COMMISSION RATE	0.06	

2/1/2006

**HELMSDALE AT LANDFALL**  
**FIGURE 7. COST ANALYSIS**



DATE: December 15, 2005  
 COMPANY: Withers & Ravenel  
 ATN: Garry Pape, P.E.  
 PHONE: 910-256-9277  
 FAX: 910-256-2584  
 QUOTE # 2902A-E  
 RE: Wetland Crossings

We are pleased to quote you a price on the Steadfast Bridge described below. The floor will be a 20 gage galvanized composite floor deck. Reinforcing steel and pouring of the lightweight concrete shall be by the owner or contractor. This bridge will be fabricated from A572 carbon steel and hot-dip galvanized as per ASTM A123. All Steadfast Bridges carry a 10 year limited warranty. Shop drawings signed and sealed by a Professional Engineer registered in the State of North Carolina will be provided. Location: Wilmington, NORTH CAROLINA

Bridge Type: Beam Truss	AREA #1	AREA #2	AREA #3 & 4	DRIVEWAY
Width in feet	34'-0"	34'-0"	34'-0"	16'-0"
Span in feet	28'-0"	77'-0"	60'-0"	60'-0"
Type steel	A572 GALVANIZED	A572 GALVANIZED	A572 GALVANIZED	A572 GALVANIZED
Type floor (shipped loose)	CONCRETE	CONCRETE	CONCRETE	CONCRETE
Floor thickness	8"	8"	8"	8"
Field splice	YES	YES	YES	YES
Dead Load PSF	105	115	115	125
Live Load PSF	AASHTO	AASHTO	AASHTO	AASHTO
Vehicle Load LBS.	HS - 20	HS - 20	HS - 20	HS - 20
Assembled Weight LBS.	32,484	125,606	89,587	52,123
Vert. abutment load KIPS	146	277	239	182
Horiz. abutment load KIPS	6	17	14	14
Truss height in feet	N/A	N/A	N/A	N/A
Beam camber	NONE	NONE	NONE	NONE
Hwy guide rail	YES	YES	YES	YES
Bearing pads	YES	YES	YES	YES
Setting plates	YES	YES	YES	YES
Special features	NONE	NONE	NONE	NONE

Bridge cost delivered	\$58,080	\$202,159	\$147,643	\$90,744
			times 2 bridges.	
			\$295,286	

Total of all bridges \$646,269

Delivery: 6 to 8 weeks (delivery schedule subject to backlog at time of drawing approval).  
 Bridge will be delivered to nearest location easily accessible to over-the-road trucks.  
 Teflon slip pads and setting plates shipped with bridge.  
 No slopes or skews are included unless specifically mentioned above.  
 Anchor bolts, sales tax, unloading, erection, supports, and abutment designs not included.  
 Terms: 1/3 down, balance 20 days after delivery, pending credit approval.  
 This quote is valid for 30 days. Please call if you have any questions (866-294-9767).

Your Name Here \_\_\_\_\_ Accepted By: \_\_\_\_\_  
 Your Title Here \_\_\_\_\_ Title / Date: \_\_\_\_\_

STEADFAST BRIDGES \* 400 Union Hill Dr., Suite 250 \* Birmingham, AL 35209 \* A CONTECH Company

NOTE: ESTIMATE DOES NOT INCLUDE INSTALLATION  
 (APPROX. 30% TO 40% ADDL)

HELMSDALE AT LANDFALL  
 FIGURE 8. BRIDGE ESTIMATE

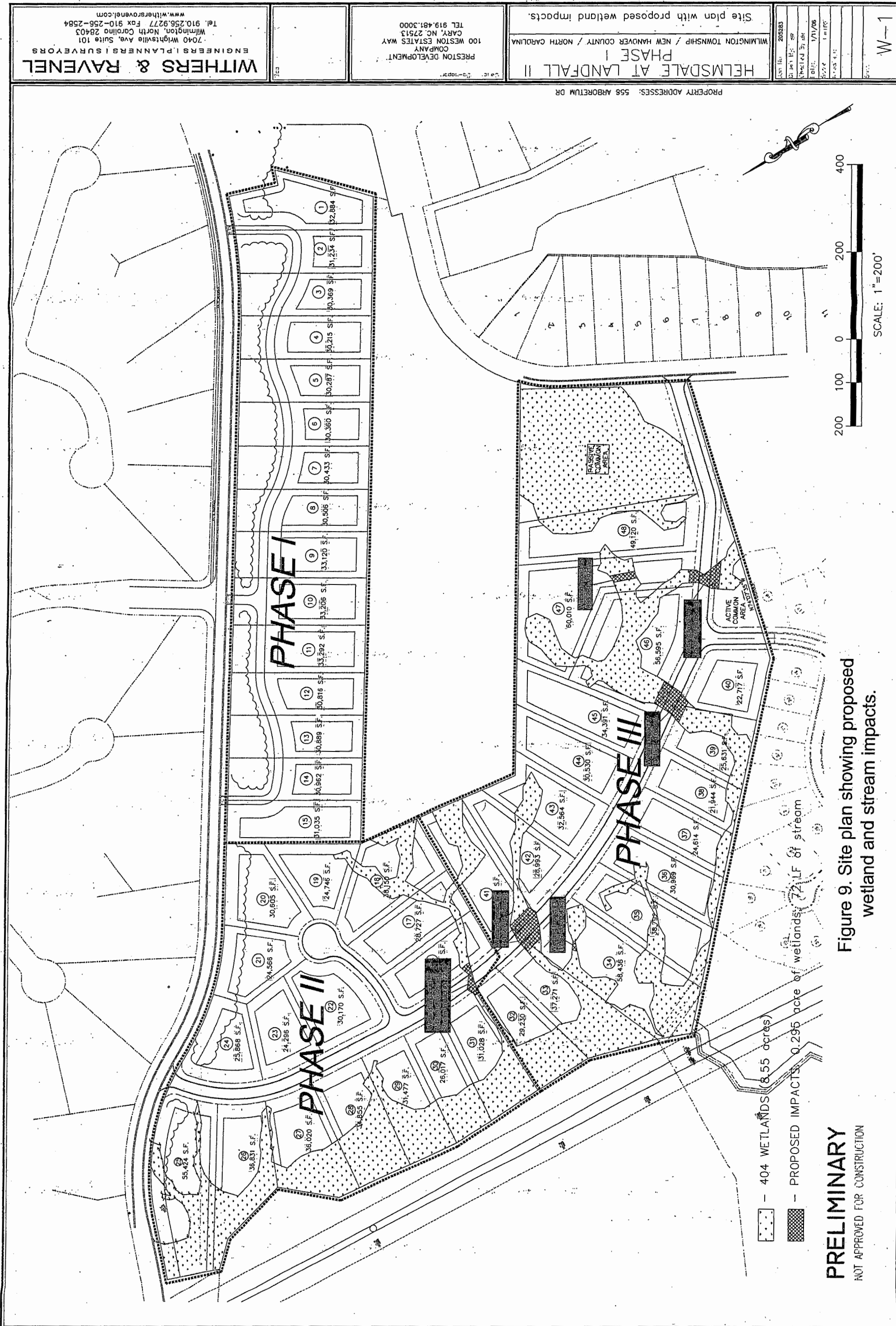
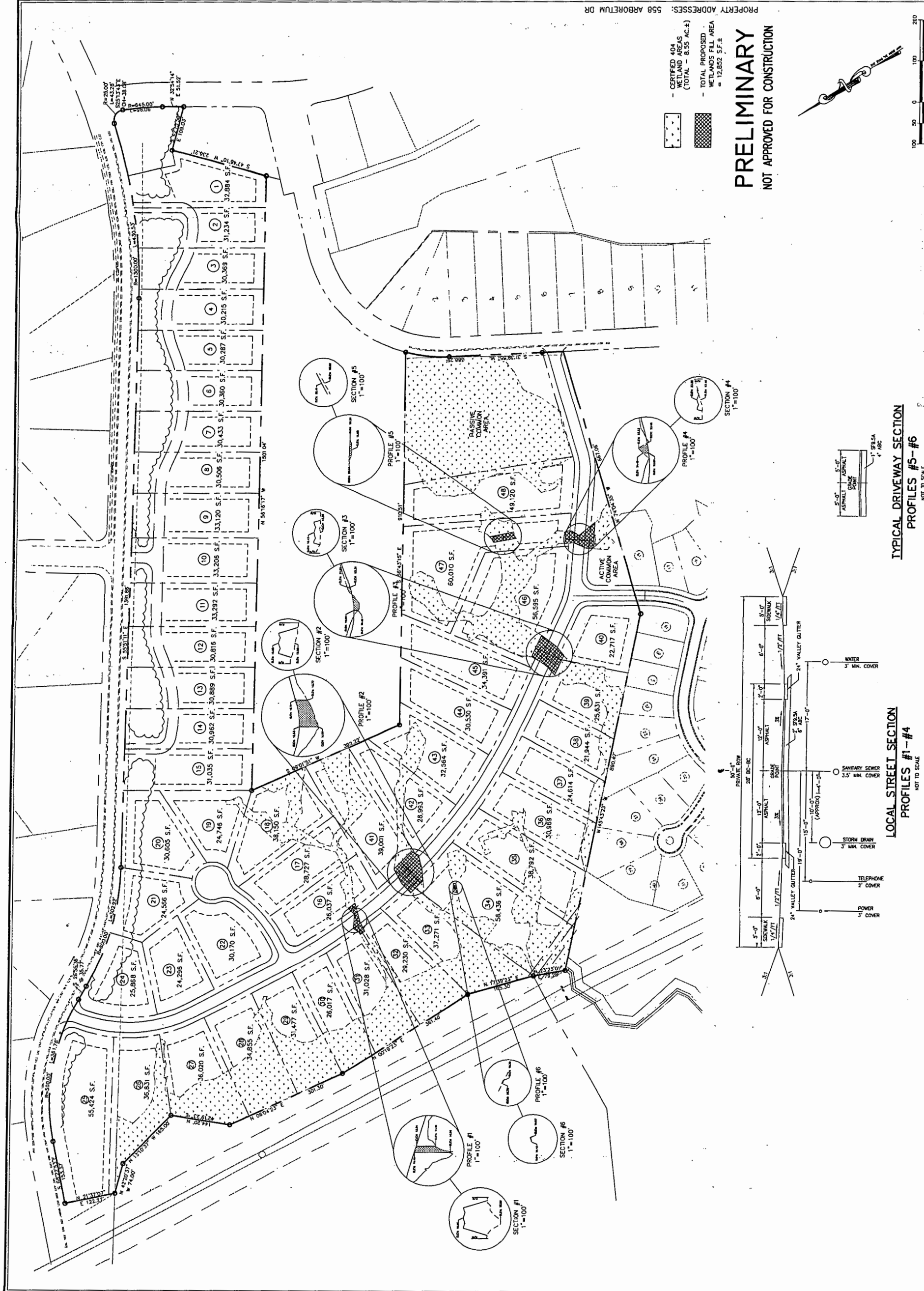


Figure 9. Site plan showing proposed wetland and stream impacts.

HELMSDALE AT LANDFALL II  
WILMINGTON TOWNSHIP / NEW HANOVER COUNTY / NORTH CAROLINA  
WETLAND IMPACT MAP - PROFILES & SECTIONS

**WITHERS & RAVENEL**  
ENGINEERS | PLANNERS | SURVEYORS  
7040 Wrightsville Ave., Suite 101  
Wilmington, North Carolina 28403  
Tel. 910.256.9277 Fax 910-256-2584  
[www.withersevenel.com](http://www.withersevenel.com)



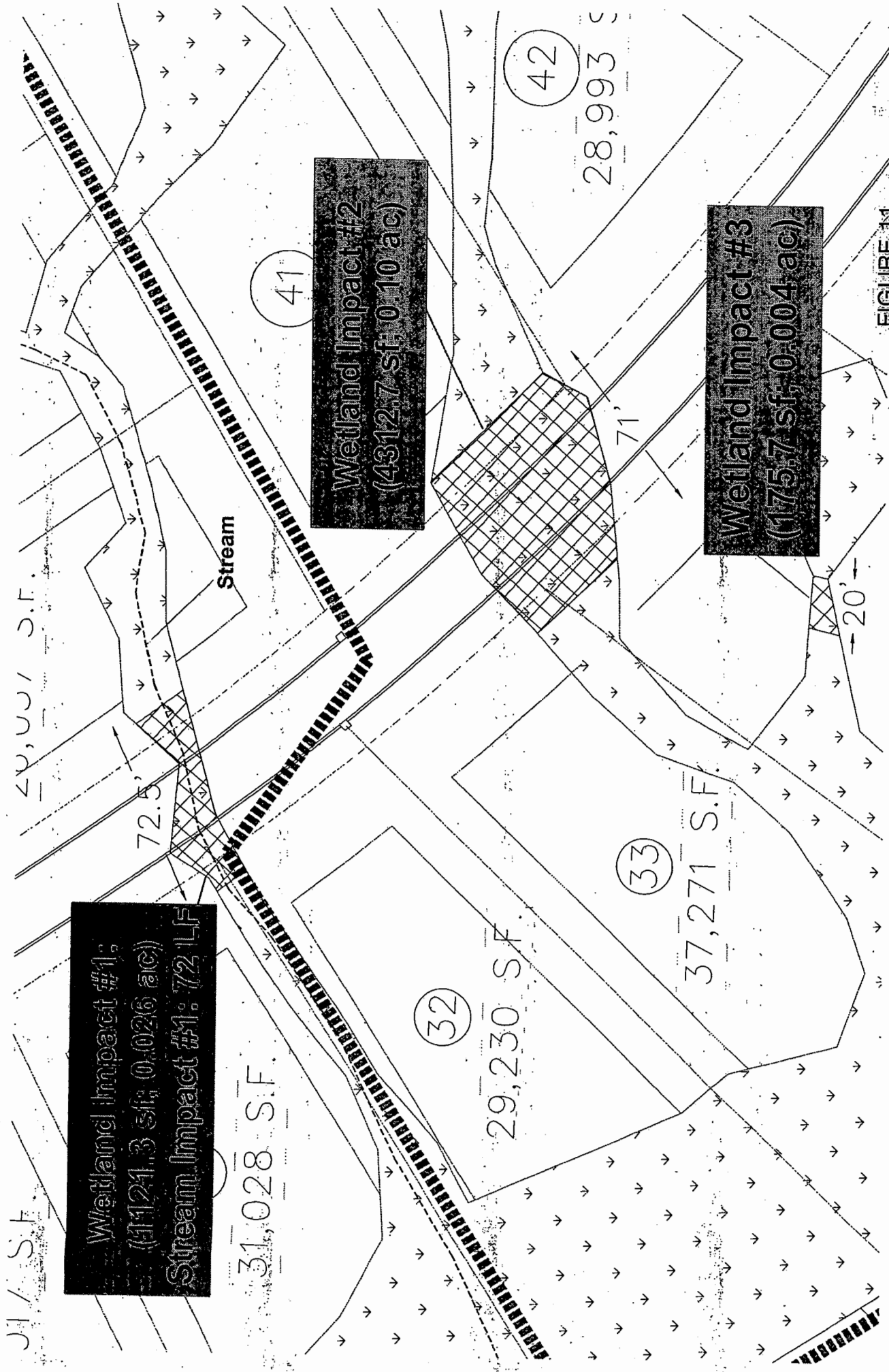


FIGURE 11.

# Helmsdale at Landfall

Proposed Wetland Impacts #1 - 3; Stream Impact #1

Withers & Ravenel  
Land Management Group, Inc.

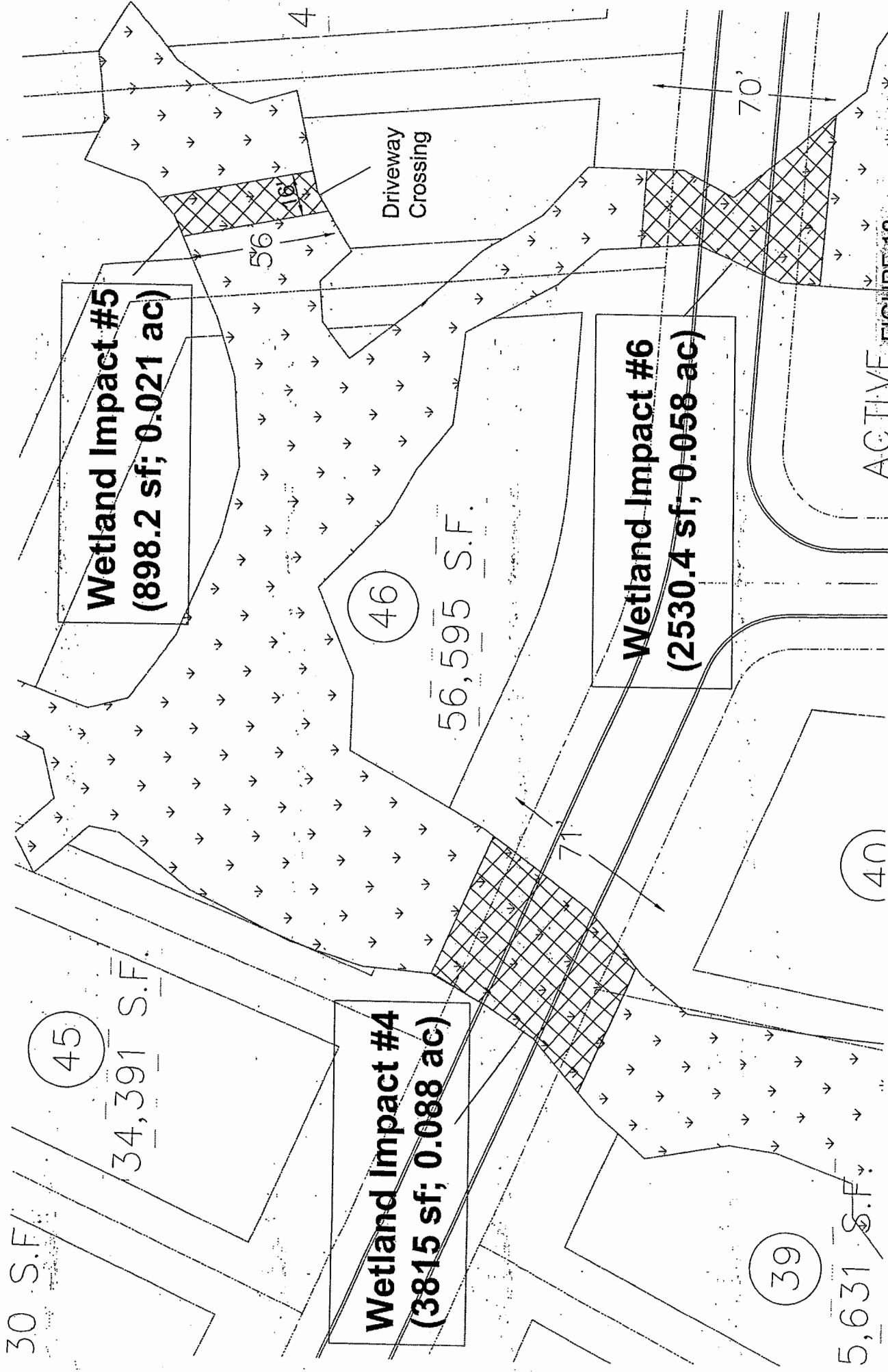
January 2006



SCALE: 1"=50'

- CERTIFIED 4D4 WETLAND AREAS (TOTAL - 8.55 AC.±)
- TOTAL PROPOSED WETLANDS FILL AREA

PRELIMINARY  
NOT APPROVED FOR CONSTRUCTION



- 404 WETLANDS (8.55 acres)
- PROPOSED WETLAND FILL



SCALE: 1" = 50'

PRELIMINARY  
NOT APPROVED FOR CONSTRUCTION

# Helmsdale at Landfall

Proposed Wetland Impacts 4 - 6

January 2006

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Figure 13. Landfall Subdivision showing  
Hemsdale project area and proposed  
mitigation areas.

NOT TO SCALE



**Landfall**

Offered by Landfall Realty, LLC

The Realtor of Choice

800.227.8208 • 910.256.6111

[www.landfallrealty.com](http://www.landfallrealty.com)